

Unclassified Paper

NAVAL WAR COLLEGE
Newport, R.I.

DJTFAC DEEP: A LOGISTICS AUGMENTATION CELL FOR THE OPERATIONAL
COMMANDER

By

John C. Tobin
Major, United States Air Force

A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Maritime Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College, the Department of the Navy, or the Department of the Air Force.

Signature: John C. Tobin

5 February 2001

Paul J. St. Laurent

Professor Paul J. St. Laurent
Head, JMO Department
College of Continuing Education

20010511 045

1. Report Security Classification: UNCLASSIFIED			
2. Security Classification Authority:			
3. Declassification/Downgrading Schedule:			
4. Distribution/Availability of Report: DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.			
5. Name of Performing Organization: JOINT MILITARY OPERATIONS DEPARTMENT			
6. Office Symbol: C		7. Address: NAVAL WAR COLLEGE 686 CUSHING ROAD NEWPORT, RI 02841-1207	
8. Title (Include Security Classification): DJTFAC DEEP: A LOGISTICS AUGMENTATION CELL FOR THE OPERATIONAL COMMANDER UNCLASSIFIED			
9. Personal Authors: Major John C. Tobin, USAF			
10. Type of Report: FINAL		11. Date of Report: 5 February 2001	
12. Page Count: 28		12A Paper Advisor: Professor Paul J. St. Laurent	
13. Supplementary Notation: A paper submitted to the Faculty of the NWC in partial satisfaction of the requirements of the JMO Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.			
14. Ten key words that relate to your paper: Logistics, joint, DJTFAC, joint theater logistics, logistics augmentation cell, planning.			
15. Abstract: Combatant commanders need well-trained and responsive theater logistics capabilities beginning in the earliest days of any operation. While employment of a deployable joint task force augmentation cell (DJTFAC) provides overall joint staff expertise, a DJTFAC-modeled logistics augmentation cell (LOGAC) can provide the commander's J-4 staff the joint perspective and cohesion needed in a rapidly developing theater. Historically, examples abound of how overwhelming US logistical capability rose to meet the challenges of the past. The US may not have this luxury in the future. Joint Vision 2020 and those charged with reshaping the DoD's future have articulated anticipated future demands upon logistics systems. Logisticians must offer the CINC enhanced unity of effort, insist on a smaller logistics footprint, avoid duplication of effort, and do all this in an increasingly complex technological environment. Enhanced J-4 staffs, separate logistics commands, and the US Army's Theater Support Command represent several of the suggested logistics C2 organizations intended to meet current and future demands. Unfortunately, significant drawbacks and obstacles for each must be overcome. The LOGAC concept provides an effective response to the theater logistics problems encountered in the past and can meet anticipated future challenges. It can enhance the ability of any theater logistics C2 organization and provide the CINC or a designated JTF commander needed logistics expertise and enable combat capability.			
16. Distribution / Availability of Abstract:	Unclassified X	Same As Rpt	DTIC Users
17. Abstract Security Classification: UNCLASSIFIED			
18. Name of Responsible Individual: CHAIRMAN, JOINT MILITARY OPERATIONS DEPARTMENT			
19. Telephone: 841-6461		20. Office Symbol: C	

ABSTRACT

Combatant commanders need well-trained and responsive theater logistics capabilities beginning in the earliest days of any operation. While employment of a deployable joint task force augmentation cell (DJTFAC) provides overall joint staff expertise, a DJTFAC-modeled logistics augmentation cell (LOGAC) can provide the commander's J-4 staff the joint perspective and cohesion needed in a rapidly developing theater.

Historically, examples abound of how overwhelming US logistical capability rose to meet the challenges of the past. The US may not have this luxury in the future.

Joint Vision 2020 and those charged with reshaping the DoD's future have articulated anticipated future demands upon logistics systems. Logisticians must offer the CINC enhanced unity of effort, insist on a smaller logistics footprint, avoid duplication of effort, and do all this in an increasingly complex technological environment.

Enhanced J-4 staffs, separate logistics commands, and the US Army's Theater Support Command represent several of the suggested logistics C2 organizations intended to meet current and future demands. Unfortunately, significant drawbacks and obstacles for each must be overcome.

The LOGAC concept provides an effective response to the theater logistics problems encountered in the past and can meet anticipated future challenges. It can enhance the ability of any theater logistics C2 organization and provide the CINC or a designated JTF commander needed logistics expertise and enable combat capability.

TABLE OF CONTENTS

ABSTRACT.....	ii
INTRODUCTION.....	1
HISTORICAL PERSPECTIVE.....	3
The Gulf War.....	4
Somalia.....	6
East Timor.....	8
NATURE OF FUTURE JOINT LOGISTICS.....	9
Joint Vision 2020.....	10
Defense Science Board.....	12
JOINT THEATER LOGISTICS COMMAND AND CONTROL OPTIONS.....	14
Theater Support Command.....	14
DEPLOYABLE JOINT TASK FORCE AUGMENTATION CELL.....	16
RECOMMENDATION.....	17
CONCLUSION.....	18
APPENDIX A.....	19
Figure 1. Focused Logistics Transformation Path.....	19
Figure 2. Core Logistical Function Comparison.....	20
NOTES.....	21
BIBLIOGRAPHY.....	24

DJTFACT DEEP: A LOGISTICS AUGMENTATION CELL FOR THE
OPERATIONAL COMMANDER

On August 8th, 1990, Major General Gus Pagonis arrived on the ramp of King Abdul Aziz Airbase in Dhahran, Saudi Arabia. General Pagonis was sent to Saudi Arabia initially to arrange host nation support for coalition troops already deploying to the Persian Gulf Region. Later, he would become commander of one of the largest logistical efforts the modern world has ever known.¹ The J-4 (logistics) member of the US Central Command's (CENTCOM) deployable joint task force augmentation cell (DJTFAC), who had deployed just two days prior, met General Pagonis at the airplane. The general learned the 41-person DJTFAC was well versed in the situation and had in fact been involved for months in contingency planning for what would soon become "DESERT SHIELD." The DJTFAC members were drawn from throughout CENTCOM's forces and represented all the "Js" as well as the component forces assigned to CENTCOM. With few exceptions, this joint group of soldiers, sailors, marines, and airmen had exercised war plans together and seemed to have a strong rapport with each other. General Pagonis was whisked away to a large building adjacent to the airfield. Inside he received a welcome surprise. The DJTFAC J-4, recognizing the heavy front-end logistics requirements involved in the massive build-up expected, had deployed one of CENTCOM'S Logistics Augmentation Cells (LOGAC). The LOGAC was a virtual goldmine of logistical experience. All the disciplines he needed were represented. Transportation, food service, engineering, host-nation support, contracting, port operations, supply, and maintenance experts from each of the US service components were seated before him, prepared to brief on capabilities and ongoing efforts. The General

learned that the LOGAC was trained and capable to fall in on any logistics organization he chose to utilize in theater. If his decision were to deploy the US Army's theater support command (TSC) or to move a portion of CENTCOM's main J-4 staff to the Gulf, the LOGAC would augment as required and desired. In the event General Pagonis decided to establish a provisional support command, the LOGAC was prepared to become the seedbed from which the new organization could grow. General Gus Pagonis drew a heavy sigh of relief. Although he knew the hard work was just beginning, he could rest easy knowing this core of experts was at his disposal.

General Pagonis woke up with a start as the aircraft flying him into Dhahran touched down. He'd been dreaming. His heart fell as he stepped onto the ramp. There was no LOGAC. Instead he observed:

"The more you looked, the more appalled you were by what you saw. There were already thousands of American troops on the ground, standing, sitting, or milling around. Every few minutes another transport plane would arrive, pouring hundreds more soldiers into ever-denser knots around the runway. Shelter from the blazing sun was almost impossible to find, and in a few places where a building or aircraft threw off some shade, soldiers jockeyed for position. A lone American officer stood heroically in the midst of this cyclone, trying to impose order on chaos...Against odds that were getting worse by the minute, he and a few overworked representatives of the Saudi military... were trying to set up an impromptu structure for receiving the 82nd Airborne."²

It would be several weeks before General Pagonis would receive the last of the twenty personally requested logistical experts that formed the core of the ad hoc logistics team he desperately needed. For now he would have to make do with whatever resources and people he could commandeer.³

Never again should the American military settle for an ad hoc logistics effort. Desert Shield and Storm will go down in history as an incredible accomplishment made possible by

the extraordinary talent and dedication of General Pagonis and the legions of logisticians who followed him. However, combatant commanders (CINC) or their designated joint force commanders (JFC) need well-trained and responsive theater logistics capabilities from day one. While employment of a DJTFAC provides overall joint staff expertise, a DJTFAC-modeled LOGAC can provide the commander's J-4 staff the joint perspective and cohesion needed in a rapidly developing theater.

In this paper, I will analyze the need for a LOGAC by first exploring the historical context of joint logistics, both in major war fighting operations as well as during contingencies. The nature of future joint theater logistics will be discussed next, along with proposals for logistics command and control (C2) organizations. Finally, I will expand on the LOGAC concept described in General Pagonis' "dream." As a result, this analysis will demonstrate how a LOGAC can counter historical logistical problems, address future challenges, and enhance any theater logistics C2 organization.

Historical Scorecard: How Well Are The CINCs Supported?

The last decade of the millennium provided incredible challenges to the Department of Defense (DoD). A major theater war started the decade followed by several contingencies and military operations other than war (MOOTW). The joint task force (JTF) is rapidly becoming the command structure of choice to project American military force. Case in point: US European Command activates a crisis action team on the average of one every six weeks! Unfortunately, the often ad hoc nature of JTFs, coupled with the increased use of combined forces, can degrade the efficiency of joint force logistics.⁴ The following historical cases highlight the need for the flexible, yet less ad hoc, logistics C2 possible in a LOGAC.

The Gulf War

General Pagonis' 22^d Support Command (SUPCOM) worked absolute miracles considering the logistical start to the Gulf War described earlier. The sheer amount of material and services provided speak for themselves: 122 million meals served; 1.3 billion gallons of fuel pumped; 52 million miles driven delivering supplies; 31,800 tons of mail delivered; and reception and positioning of 560,000 troops along with their equipment and supplies.⁵ Although the 22 SUPCOM provided the preponderance of US Army logistics, each of the component services fended much for themselves.

The US Air Force deployed over 85 percent of its tent inventory, which provided extremely livable conditions considering the harsh environment. Host nation support accounted for much of the Air Force's food requirements.⁶ Air Force and Navy pre-positioned ships helped reduce the burden on national lift capability.⁷ One logistician studying joint logistics lessons from the Gulf War noted independent component logistical operations, rather than integrated joint logistics capabilities, may have created the conditions for overall success.⁸

In fact, to call the 22 SUPCOM joint would be a gross misrepresentation. One critic, in response to General Pagonis' suggestion that the third star he was awarded during the Gulf War "symbolized the importance of a single and authoritative logistics point of contact," pointed out "his 22 Support Command did represent the single point of contact for *Army* logistics, but he had little information about Air Force or Marine Corps logistics, and absolutely none about the Navy or coalition forces. Thus there was no comprehensive logistics picture for the joint force commander." The critic noted he based his analysis on statements contained in the Gulf War Air Power Survey.⁹ Other problems noted included

difficulties with initial deployment. There was no time phased force deployment data (TPFDD) or approved operation plan at first. Initially, units deployed according to a TPFDD developed for a recent exercise. Furthermore, the process of developing a TPFDD was ineffective during crisis action planning. Also, in-transit visibility (ITV) of supplies and materials arriving in theater was a problem throughout the war. One estimate points out over half of the 40,000 containers deployed to theater had to be physically opened to determine contents, ownership, and final destination. The unfortunate results of this lack of visibility were duplicate orders and inflation of priority codes assigned to requisitions. Another related difficulty was the inability to track unit closure status due to software limitations. Inadequate ITV coupled with the unit closure tracking problems meant planners and the CINC didn't have a clear picture of combat strength and sustainability.¹⁰

Actually, General Pagonis' penchant for ad hoc organizations strongly supports implementation of a LOGAC. Prior to his deployment to the Gulf, he identified 20 "ringers"-- experts in different logistics disciplines that would form his core planning cell. Dubbed the logistics operations center, it began much as the LOGAC could.

Another innovation of the 22 SUPCOM/CC was the "Log Cell." This small think tank was comprised of five of the sharpest logistics officers General Pagonis knew. Its task was to collect and analyze operations-related data and build plans to address possible contingencies.¹¹

Both of these entities were designed to provide the same benefit of the conceptual LOGAC. The greatest advantage of the LOGAC over the ad hoc organizations General Pagonis created is that a LOGAC will have the opportunity to train and exercise together during peacetime. Arriving in-theater as a trained cohesive team accustomed to working

together under potentially stressful conditions will allow the LOGAC to hit the ground running.

Somalia

Operation RESTORE HOPE represents another example of a situation where employment of a LOGAC would be advantageous to the overall logistics effort. At the operation's onset, the Marine Corps forward service support group (FSSG) provided logistical support to the 11th Marine Expeditionary Unit. Within less than one month, the FSSG's workload swelled to include providing supplies and services to 24 foreign military units, several humanitarian relief organizations, and the United Nation's civilian and military commands.¹²

The inappropriateness of using the FSSG to provide support of this magnitude was recognized early and plans were made to create an ad hoc joint task force support command (JTFSC). The mission of this new organization was "to provide logistics and medical support for US forces deployed in support of Operation Restore Hope."¹³

During a 1993 interview, Major General Steven Arnold, Commander, Army Forces Somalia, pointed out to researchers several valuable lessons learned from his experience in Mogadishu. First, due to the timing of the decision to stand up the JTFSC, the decision authority for determining composition of the TPFDD changed. The unfortunate result of this was the JTF staff made the decisions on when and what was deployed into theater. General Arnold stated that as a consequence, 17 percent of the assets arriving were either not off-loaded or were off-loaded and then immediately re-loaded onto ships because of confusion over what actual requirements would be. This breakdown in logistics C2, apparently caused by the transition to an ad hoc logistics command structure, caused confusion over responsibilities and tremendous waste of resources.¹⁴

General Arnold pointed out creation of an ad hoc JTFSC was not based on current accepted doctrine. Joint Publication 4-0, Doctrine for Logistic Support of Joint Operations, states the CINC may designate the Service component that is the dominant logistics user as the common provider for all US forces in theater.¹⁵ It seems reasonable for General Arnold to assume he would be responsible for the logistics effort based on this understanding of joint doctrine.

Another problem that arose from improper sequencing of logistics personnel was the unavailability of transportation specialists trained to off-load ships “in the stream.” This TPFDD related problem, coupled with rough seas, resulted in two ships returning to port in Diego Garcia without unloading after being deployed thirty days. In the book, Somalia Operations: Lessons Learned, author Kenneth Allard noted these problems were due to a lack of “clear delineation of authority within the joint task force to clarify who is in charge of making these things happen—and in time to make a difference.”¹⁶ Allard also pointed out an instance where the Army requested shipping to return Humvees to home stations while the Marine Corps simultaneously requested shipping to bring their CONUS-based Humvees to Somalia.¹⁷ This lack of coordination may seem ridiculous in retrospect, but wasting critical sealift during MOOTW or combat operations can have serious repercussions.

One final critique of the logistics effort in Somalia concerned the failure to establish a central receiving point for the theater. An arrival and departure airfield control group (A/DACG) was established at the Mogadishu airport. This organization received supplies and equipment and notified direct support units for pick-up. Unfortunately, if A/DACG personnel couldn’t determine which unit the shipment was intended for, they simply gave it to the next unit making a pick-up. This procedure ensured the airfield was kept clear of

unclaimed freight, but certainly wasn't effective at getting the right supplies to the right customer.¹⁸

Once again, the utility of a LOGAC becomes evident. A trained cell of joint logisticians could have eased the transition between the initial and follow-on logistics command in the Somalia theater, minimizing the disruptive effects on troops counting on effective support.

East Timor

US involvement in the effort to restore order to the former Indonesian province of East Timor was a unique task for the US military that may be the wave of the future. The operation was unique in that Australia was the leader of the United Nations sanctioned coalition called International Forces East Timor (INTERFET), with the US in a supporting role. Also important to note, the bulk of US support was in the form of logistical support along with command and control, strategic lift, civil affairs, and planning support.¹⁹

Appropriate portions of US Pacific Command's (PACOM) DJTFAC were sent to Okinawa, Japan to perform initial planning in concert with the 3rd Marine Expeditionary Force. At the request of the Australians, a team of 17 DJTFAC members eventually deployed to East Timor as part of overall US support.²⁰

The mission in East Timor began as Operation WARDEN, a peacemaking effort aimed at stopping the destruction and lawlessness caused by armed militias opposed to a recent vote for independence from Indonesia. Operation STABILIZE was the follow-on peacekeeping mission designed to preserve the restored peace and help rebuild East Timor's destroyed infrastructure.²¹

A recent interview with Colonel Randolph Strong, the former Commander, US Forces East Timor, highlighted the success of the operation, but he did make several suggestions for

improvement. First, a separate JTF for US forces was never established. Colonel Strong believed a clarified organizational structure would have eased administrative and C2 issues. He also pointed out the bulk of US equipment was not accounted for in mobility plans. This led to difficulties getting necessary items into theater. The Colonel predicted there would be many more deployments like the one to East Timor, where the emphasis is on support versus combat operations. He also emphasized that it's OK to be in a support role to an ally, especially when the objectives are clear and the desired end state well defined.²²

Although US involvement in East Timor was minor compared to the previous cases explored, the argument for a LOGAC is just as strong. A small, tailored logistics cell, capable of augmenting an international task force like INTERFET, as easily as it could an American JTF, is a powerful capability for the CINC to offer our allies or the United Nations.

Nature of Future Joint Theater Logistics: What will the CINC need?

The major combat operations and MOOTW described above reflect the spectrum of demands placed upon US military logisticians. As our forces get leaner and assigned missions become even more diverse, "brute force" logistics will no longer be possible. Two documents, the Chairman of the Joint Chiefs' Joint Vision 2020 and the Report of the Defense Science Board Task Force on DoD Logistics Transformation, Volume 2, both help paint a picture of what the future may demand from the US military and specifically from its logisticians.

Joint Vision 2020*

“Dedicated individuals and innovative organizations transforming the joint force for the 21st century to achieve full spectrum dominance”

General Henry H. Shelton, Chairman, Joint Chiefs of Staff (2000)

The Chairman’s vision for the future of the Defense Department is marked by the idea of transformation and innovation. The US military structure may not be recognizable to any of us currently wearing the uniform in just a few short years. Joint Vision 2020 describes the joint chiefs’ best guess concerning the future environment the military will be asked to operate, and more importantly, what changes the services must make to be effective in that environment. The foundation for this vision is laid upon three core strategic assumptions:

1. Global interaction will bring America closer to its allies and potential adversaries. The implications of this view include significant US involvement with multinational military, civic and international organizations.
2. Technological parity will exist between the US and its adversaries, driven by near equal access to a global commercial industrial base and much of the same technology.
3. Adaptive adversaries may cause the US advantage to erode as they exploit technologies and strategies that provide asymmetric threats to American strengths.

In short, the dynamic environment provided by the explosion of new technologies will not only test US capabilities to fully exploit opportunities, but also to defend against new vulnerabilities.

The cornerstone of Joint Vision 2020 is the concept of full spectrum dominance, defined as “the ability of US forces, operating unilaterally or in combination with multinational and interagency partners, to defeat any adversary and control any situation across the full range

* To avoid frequent and repetitious references, and in accordance with the Naval War College Style Manual and Classification Guide, August 2000, page 32, the author will only cite the source document once. The information and discussion in this section is based solely on the Joint Chiefs of Staff’s, Joint Vision 2020, (Washington DC: June 2000).

of military operations.” Key enablers to meet the demand of full spectrum dominance are information superiority and innovation. Required abilities of the joint force of the future are characterized by the following operational concepts: dominant maneuver, precision engagement, focused logistics, and full dimension protection. Although all four operational concepts have implications for logisticians, obviously the most direct impact comes from focused logistics.

“Focused logistics is the ability to provide the joint force the right personnel, equipment, and supplies in the right place, at the right time, and in the right quantity, across the full range of military operations. This will be made possible through a real-time, web-based information system providing total asset visibility as part of a common relevant operational picture, effectively linking the operator and logistician across services and support agencies. Through transformational innovations to organizations and processes, focused logistics will provide the joint war fighter with support for all functions.”

Joint Vision 2020

Obviously this definition does not suggest the status quo. Significant transformation will need to occur if the services are to emerge with the focused logisticians envisioned and required for the anticipated future. Figure 1 in Appendix A depicts the near term changes planned for this transformation along with specific tasks for logisticians.

Joint Vision 2020 challenges today’s military logisticians to prepare for a decidedly different future. The skill set required to accomplish the tasks described above does not suggest success via an ad hoc organization. A LOGAC may be necessary to ensure the theater commander has a fully trained and cohesive logistics team in place to provide “Focused Logistics” in the increasingly complex environment described in the Chairman’s vision.

Report of the Defense Science Board Task Force on DoD Logistics Transformation *

Another study that provides insight concerning future demands on military logistics organizations is the Report of the Defense Science Board Task Force (DSBTF) on DoD Logistics Transformation, Volume 2. This report, commissioned by the Undersecretary of Defense for Acquisition & Technology, examined four distinct areas: requirements, deployment, sustainment, and technology. The report emphasized seven points of which the four most relevant to theater-level logistics are summarized below:

1. Today's military suffers from a separation of logistics and operations and reliance on mass rather than efficiency and certainty. The current logistics system frequently constrains operations and drains scarce resources needed for force modernization.
2. Failure to blend logistics with operations will be a "showstopper" for DoD's planned revolution in military affairs.
3. Failure to recognize logistics as a BIG DEAL (the reports emphasis, not mine) will have unacceptable consequences in the 21st century battle space resulting in decreased ability to achieve national security objectives and cost.
4. It is possible to transform the current system to be responsive to the CINC's needs, support rapid closure of combat power, permit a smaller footprint (both people and equipment), be more agile and survivable, fully integrate business processes and information systems, be integrated with industry, and be less expensive.

The report cited four findings relevant to the discussion of a needed operational logistics C2 structure. First and foremost, the DSBTF stated that CINCs are unable to perform their Title 10 responsibilities to plan and manage theater logistics. The current "push" concept of logistics clogs the lift and supply pipelines with unneeded material creating an avoidable burden. DoD needs better theater logistics information tools to facilitate a CINC's ability to "pull" requirements into theater. The report suggests that CINCs should have in-theater

* To avoid frequent and repetitious references, and in accordance with the Naval War College Style Manual and Classification Guide, August 2000, page 32, the author will only cite the source document once. The information and discussion in this section is based solely on the Defense Science Board's, "Report of the Defense Science Board Task Force on DoD Logistics Transformation, Volume 2", (Washington DC: December, 1998).

logistics component commanders to manage all common support. Secondly, the DSBTF condemns DoD's logistics system, citing it as fragmented and lacking end-to-end control, integrated performance or accountability. The report calls for the appointment of the Deputy Undersecretary of Defense for Logistics as the "chief architect" of the new logistics concept, tasked to oversee all transformation efforts. Aggressive benchmarking of civilian industry is recommended in order to find innovative ways to become more lean and responsive. Figure 2 in Appendix A underscores comparative success of civil industry and the DoD. Third, the DSBTF states that changing how the military deploys and sustains its forces is absolutely necessary. Forces must be tailored to probable lift capabilities and reflect a unified movement system across services. Exploitation of commercial lift by enhancing the Civil Reserve Air Fleet and improving alternatives to delivery through normal ports, such as joint logistics over-the-shore, should be a priority. Finally, the report points out logistics systems and nodes are attractive targets for adversaries. Particular attention should be paid to airlift takeoff and landing areas, prepositioned assets, and civilian infrastructure.

Like Joint Vision 2020, the Defense Science Board's findings have far reaching implications for operational logistics. Incorporating best business practices, improving efficiency of airlift use, and creating more effective logistics information tools for the theater commander will streamline logistical decision making and increase the tempo of support operations. Logistics C2 will need to improve to keep pace. Perhaps the most important finding of the Defense Science Board concerns the CINC's inability to perform Title 10 responsibilities for logistics and the recommendation to provide an in-theater logistics functional commander to manage common support.

Joint Logistics: Realizing the Chief's Vision

Several logistics C2 organizations have been proposed in response to the difficulties encountered during past operational logistics challenges and in preparation to meet the demands of the future. One potential solution is the creation of a JTF J-4 staff of sufficient depth to provide common support for assigned forces. Joint doctrine suggests tailoring of the JTF J-4 organization according to the anticipated demands of the specific operation and inclusion of representatives or liaison personnel from each service component.²³ Other options propose augmenting the CINC's J-4, creating a stand-alone logistics agency, or simply directing the predominate service in theater to manage joint requirements.²⁴

Critics of these options focus on several shortcomings. First, options involving JTFs are usually ad hoc in nature. Personnel assigned to a JTF after a crisis emerges are already behind. Synergies magnified by training or planning together are never realized.

Establishing standing JTFs may seem like the way to overcome this drawback, but manning requirements are prohibitive. Furthermore, the potential for a CINC to need more than one JTF at a time in our turbulent world is very real and magnifies the resource limitation problem.²⁵ Many feel the US Army has already created the organization that best meets the demands of known and anticipated theater logistics.

Theater Support Command

For several years, the Army has been developing a new organization to provide theater level combat service support to joint forces. The theater support command (TSC) remains under the command of the Army service component commander (ASCC) and focuses on force generation, force sustainment, and redeployment.²⁶

A unique aspect of the TSC is that it can be employed in a modular fashion. Particularly valuable is the early entry module (EEM), providing a rapidly deployable C2 and planning capability to the ASCC during the critical reception, staging, onward movement, and integration phase of force projection. The concept allows deployment within C+2 or 3 of a carefully tailored theater force-opening package (TFOP).²⁷ The 29-man TSC C2 and assessment team precedes operating elements of the TFOP. This team quickly determines and validates assumptions concerning support requirements and theater infrastructure capabilities.²⁸

In addition to modularity, Draft Army Field Manual 63-4 provides TSC design characteristics that articulate its value to the JFC. First and foremost, the TSC enhances unity of command; not only by pulling together all combat service support (CSS) under the ACSS, but also by synchronizing support for all services operating in the theater. This is accomplished by integrating liaison teams from the Air Force, Navy, and Marine Corps into its overall command structure as appropriate. Also, battle-rostered personnel positions are predesignated for the EEM. This ensures the EEM capabilities are available during theater opening and facilitates peacetime planning and training that may lead to a smoother transition into war or MOOTW. Finally, the TSC has the capability to provide centralized distribution management of common supplies and equipment within the theater.²⁹

The TSC concept seems to provide the best option for supporting the joint or combined force. However, several problems remain. First, the TSC only incorporates component service liaisons after an operation begins. The value of planning and training together as a joint support force is mitigated if only the core Army component prepares during peacetime. Secondly, the TSC is an all-Army organization. The service component liaison positions

suggested to “purple-up” the TSC are merely representative in nature. What does the JTF commander do if the mission does not require Army forces or if the Army is not tasked to provide the preponderance of CSS? Finally, the Army relies on the reserve component to provide over 70% of its CSS manpower.³⁰ In fact, during the Gulf War, close to 75% of General Pagonis’ support troops were reservists. The TSC could be severely constrained if there are delays in calling-up the reserves during a similar large-scale contingency.³¹

The DJTFAC-Modeled Logistics Augmentation Cell

Combatant commanders have used DJTFACs successfully for several years. The commander in chief, US Pacific Command (CINCPAC) identifies a three-fold mission for its 45-person core DJTFAC. First, the CINCPAC DJTFAC responds to contingencies in order to provide joint staff expertise in crisis action and joint staff planning to designated JTF commanders. Second, the DJTFAC deploys in support of exercises. And third, the DJTFAC provides extensive peacetime training to CINCPAC JTFs on crisis action planning and JTF operations.³²

The CINCPAC J-4 is charged to “augment the existing Joint Task Force’s logistics staff, offering joint logistics advice and assistance in support of JTF operations. The JTF/J4 will determine the appropriate J4 organizational structure....”³³ The employment of a logistics “heavy” DJTFAC during the crisis in East Timor is a good example of this inherent flexibility.³⁴ In general, the DJTFAC is designed to provide well-trained expertise throughout the JTF staff and provides the greatest value when they become part of the JTF’s joint planning group. However, certain members, including logistics planners, can provide ongoing liaison to their JTF counterparts well after initial planning is complete.³⁵ This

ability to tailor the DJTFAC to provide greater depth in the logistics area leads to the concept of a predesignated LOGAC.

Recommendation: Make General Pagonis' Dream a Reality

The LOGAC provides all the advantages of a DJTFAC, but focuses on providing the most efficient and timely logistics support possible. The USCINCPAC DJTFAC brings seven logisticians to the JTF staff. The LOGAC would add approximately 30 more individuals, ensuring representation from each component service in all of the functional areas of logistics described in Joint Pub 4-0, as well as specialists in contracting and host-nation support.³⁶ This composition not only provides needed functional expertise, but also ensures the necessary joint perspective called for in Focused Logistics – Joint Logistic Vision for 2020.³⁷

Like a DJTFAC, core LOGAC members should be drawn from the CINC's J-4 staff, with the remaining billets filled from assigned component forces. During peacetime, LOGAC members should train and exercise together so at the onset of a contingency or war, they're capable of augmenting any of the possible operational logistics organizations described above with minimal spin-up time.

Similar to the standard operating procedures for DJTFAC employment, LOGAC members should fall under the operational control of the JTF commander once the CINC delegates this authority.³⁸ However, while DJTFAC personnel typically remain in theater only for the initial planning period, the LOGAC members can remain throughout, assisting in the planning, implementation, and redeployment phase of operations.

As the command charged by the Secretary of Defense "to ensure unity of effort and continuity for joint concept development..." US Joint Forces Command (JFCOM) is in the

best position to further develop the LOGAC concept.³⁹ The iterative process of joint experimentation: design, preparation, execution, and assessment discussed in Joint Vision 2020, can quickly meld diverse logistics forces into the LOGAC described in this paper.⁴⁰

Conclusion

Although the debate over how to best provide logistics C2 is continuous, the simple fact remains: The United States military can no longer rely on “brute force” logistics to accomplish its mission. Historically, examples abound of how overwhelming US logistical capability rose to meet the challenges of the past. The US may not have this luxury in the future. Joint Vision 2020 and others charged with reshaping DoD’s future have articulated the anticipated demands. Logisticians must offer the CINC enhanced unity of effort, insist on a smaller logistics footprint, avoid duplication of effort, and do all this in an increasingly complex technological environment. Several of the suggested logistics C2 organizations can go a long way towards providing these improvements, albeit with significant associated drawbacks and obstacles to overcome--not the least of which is the parochial nature of all the service components. It is safe to assume none of the suggested options will be fully embraced in the near term.

The LOGAC concept provides an effective response to the theater logistics problems encountered in the past and can meet anticipated future challenges. It can enhance the ability of any theater logistics C2 organization, whether ad hoc or standing. Joint Publication 1 states, “Logistics sets the campaign’s operational limits....”⁴¹ The DJTFAC-modeled LOGAC concept described in this paper can provide the CINC or a designated JTF commander with the logistics expertise and capability needed to remove or significantly minimize those limitations.

APPENDIX A

Figure 1.

Focused Logistics Transformation Path.

FY 01, implement systems to assess customer confidence from end to end of the logistics chain using customer wait time metric.

FY 02, implement time definite delivery capabilities using a simplified priority system driven by the customer's required delivery date.

FY 04, implement fixed and deployable automated identification technologies and information systems that provide accurate, actionable total asset visibility.

FY 04 for early deploying forces and **FY 06** for the remaining forces, implement a web-based, shared data environment to ensure the joint warfighters' ability to make timely and confident logistics decisions.

(Source: Joint Vision 2020, 2000)

The definition of Focused Logistics and the necessary steps on the transformation path listed above lead to several specific tasks for logisticians.

- Extensive use of advanced information technology
- Real-time total asset visibility with a common relevant operational picture
- Incorporation of enhanced decision support tools
- Seamless connection to the commercial sector
- Advantageous use of best business practices and commercial economies

APPENDIX A

Figure 2.

Core Logistical Function Comparison.

Process	DoD	Commercial Companies		
Distribution (For in-stock items)	Pick & Pull 7-days Redist: 10-days (DoD Avg)	1 day (Motorola)	3 days (Boeing)	2 days (Caterpillar)
Repair (Cycle Time)	4-144 days (DoD Avg)	3 days (Compaq)	14 Days (Boeing Electronics)	14 days (Detroit Diesel)
Repair (Shop Time)	8-35 days (Army tank/truck)	1 Day (Compaq)	10 days (Boeing Electronics)	5 days (Detroit Diesel)
Procurement (Admin Lead Time)	70 days (DLA)	4 days (Texas Instruments)	0.5 days (Portland General)	Minutes (Boeing, Caterpillar)

(Source: Defense Science Board, 1998)

The following chart underscores comparative success of civil industry and the DoD performing core logistical functions. Companies compared were selected because their profiles were similar to DoD (worldwide operators, in various climates and terrain, and same magnitude of requisitions). The study suggests the disparity is due to greater commercial sector analysis on core business processes and outsourcing of functions performed more efficiently by other businesses.

NOTES

¹ William G. Pagonis with Jeffrey L. Cruikshank, Moving Mountains: Lessons in Leadership and Logistics from the Gulf War (Boston MA: Harvard Business School Press 1992), 76.

² Ibid., 85.

³ Pagonis, 91.

⁴ Robert D. Chelberg, Jack W. Ellertson and David H. Shelley, "EUCOM – At the Center of the Vortex," Field Artillery, (October 1993): 13.

⁵ Pagonis, 1-13.

⁶ Robert L. Chadwick, "A Joint Logistics Command – Is It Needed?," (Unpublished Research Paper, U.S. Army Command and General Staff College, Fort Leavenworth, KS: 27 May 1999), 15.

⁷ Pagonis, 70.

⁸ Chadwick, 16.

⁹ David Schrady, "Combatant Logistics Command and Control for the Joint Force Commander," Naval War College Review, Summer 1999, <<http://www.nwc.navy.mil/press/review/summer/art2-su9.htm>>, [22 December 2000].

¹⁰ Ibid., 7.

¹¹ Pagonis, 103.

¹² David M. Jespersen, "Coalition Logistics in Somalia," Marine Corps Gazette, (April 1994): 32.

¹³ Steven W. Pate, "Joint Logistics at the Operational Level – Where Are We At and Where Are We Going," (Unpublished Research Paper, U.S. Army Command and General Staff College, Fort Leavenworth, KS: 1997), 41.

¹⁴ Jeffrey A. Brock, "A Joint Theater Logistics Command and Control: A Progress Report for Military Logisticians," (Unpublished Research Paper, U.S. Naval War College, Newport, RI: 5 February 1999), 4.

¹⁵ Joint Chiefs of Staff, Doctrine for Logistics Support of Joint Operations, Joint Pub 4-0 (Washington, DC: April 6 2000), I-7.

¹⁶ Kenneth Allard, Somalia Operations: Lessons Learned (Washington, DC: National Defense University Press, 1995), 51; quoted in Jeffrey A. Brock, "A Joint Theater Logistics Command and Control: A Progress Report for Military Logisticians," (Unpublished Research Paper, U.S. Naval War College, Newport, RI: 5 February 1999), 5.

¹⁷ Ibid., 49.

¹⁸ Brock, 6.

¹⁹ Philip M. Mattox and William A. Guinn, "Contingency Contracting in East Timor," Army Logistician, <<http://www.almc.army.mil/ALOG/JulAug00/MS565.htm>>, [8 January 2001]

²⁰ Robert W. DeJong, Major, United States Army, and DJTFAC Member, Interview by Author, 16 January 2001, U.S. Naval War College, Newport, RI.

²¹ James Folk and Andy Smith, "A LOGCAPS in East Timor," Army Logistician, <<http://www.almc.army.mil/ALOG/JulAug00/MS566.htm>>, [8 January 2001]

²² Randolph Strong, "The East Timor Tapes: An Interview With Colonel Randolph Strong, commander of U.S. Forces East Timor," Interview by Bill McPherson, <<http://www.Gordon.army.mil/regtmktg/AC/FALL00/strong.htm>>, [8 January 2001]

²³ Joint Chiefs of Staff, Joint Task Force Planning, Joint Pub 5-00.2 (Washington, DC: 6 April 2000), VIII-2.

²⁴ Ibid., B-2.

²⁵ Chelberg, 13-14.

²⁶ Department of the Army, Supporting Army Force Projection, Field Manual 63-4 Final Draft (Washington DC: Posted 16 January 2001), 1-3.

²⁷ Ibid., 1-5.

²⁸ Ibid., 8-2.

²⁹ Ibid., 2-5.

³⁰ JMO Army Briefing, Quoted in Michael A. Salvi, "Within the context of Joint Vision 2010, Is There a Requirement for a Theater-Level Joint Forces Logistic Commander and a Joint Theater Logistics Command?" (Unpublished Research Paper, U.S. Naval War College, Newport, RI: 5 February 1999), 16.

³¹ Pagonis, 208-209.

³² U.S. Pacific Command, Organization and Administration of USCINCPAC Deployable Joint Task Force Augmentation Cell (DJTFAC), USCINCPAC Instruction 3020.11B (Camp H.M. Smith, HI: 10 September 1997), 1-2

³³ U.S. Pacific Command, USCINCPAC/J4 Supplemental Instructions: Logistics and Engineering, J4 Supplement to USCINCPACINST 3020.11B, (Camp H.M. Smith, HI: 4 November 1996), 1.

³⁴ DeJong, 2001.

³⁵ U.S. Pacific Command, Deployable Joint Task Force Augmentation Cell (DJTFAC) Standard Operating Procedures(SOP), Memorandum, <<http://164.213.23.19/j3%2Dr/j38/djtfac.htm>>, [22 December 2000].

³⁶ Joint Pub 4-0., I-8 – I-15.

³⁷ Ibid., D-1.

³⁸ Jay B. Yakeley III and Harold E. Bullock, "Training the Pacific Warriors," Joint Force Quarterly, (Summer 1996): 17.

³⁹ Joint Chiefs of Staff, Joint Vision 2020, (Washington DC: June 2000), 34-35.

⁴⁰ Ibid., 35.

⁴¹ Joint Chiefs of Staff, Joint Warfare of the Armed Forces of the United States, Joint Pub 1 (Washington, DC: 10 January 1995), IV-1.

BIBLIOGRAPHY

- Allard, Kenneth. Somalia Operations: Lessons Learned. Washington, DC: National Defense University Press, 1995, 51. Quoted in Jeffrey A. Brock, "A Joint Theater Logistics Command and Control: A Progress Report for Military Logisticians." 5. Unpublished Research Paper, U.S. Naval War College, Newport, RI: 5 February 1999.
- Brock, Jeffrey A. "A Joint Theater Logistics Command and Control: A Progress Report for Military Logisticians." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1999.
- Chadwick, Robert L. "A Joint Logistics Command – Is It Needed?" Unpublished Research Paper, U.S. Army Command and General Staff College, Fort Leavenworth, KS: 1999.
- Chelberg, Robert D., Jack W. Ellertson and David H. Shelley. "EUCOM – At the Center of the Vortex." Field Artillery, (October 1993): 12-16.
- Defense Science Board. Report of the Defense Science Board Task Force on DoD Logistics Transformation, Volume 2. Washington DC: December 1998.
- Folk, James and Andy Smith. "A LOGCAPS in East Timor." Army Logistician. July/August 2000. <<http://www.almc.army.mil/ALOG/JulAug00/MS566.htm>> [8 January 2001].
- Jespersen, David M. "Coalition Logistics in Somalia." Marine Corps Gazette (April 1994): 32-34.
- Joint Maritime Operations Army Briefing. Quoted in Michael A. Salvi, "Within the context of Joint Vision 2010, Is There a Requirement for a Theater-Level Joint Forces Logistics Commander and a Joint Theater Logistics Command?" Unpublished Research Paper, U.S. Naval War College, Newport, RI: 5 February 1999.
- Mattox, Philip M. and William A. Guinn. "Contingency Contracting in East Timor." Army Logistician. July/August 2000. <<http://www.almc.army.mil/ALOG/JulAug00/MS565.htm>> [8 January 2001].
- McPherson, Bill. "The East Timor Tapes: An Interview With Colonel Randolph Strong, Commander of U.S. Forces East Timor." Army Communicator. Fall 2000. <<http://www.Gordon.army.mil/regtmktg/AC/FALL00/strong.htm>> [8 January 2001].
- Pagonis, William G. with Jeffrey L. Cruikshank. Moving Mountains: Lessons in Leadership and Logistics from the Gulf War. Boston: Harvard Business School Press, 1992.

Pate, Steven W. "Joint Logistics at the Operational Level – Where Are We At and Where Are We Going?" Unpublished Research Paper, U.S. Army Command and General Staff College, Fort Leavenworth, KS: 1997.

Schrady, David. "Combatant Logistics Command and Control for the Joint Force Commander." Naval War College Review. Summer 1999.
<<http://www.nwc.navy.mil/press/review/summer/art2-su9.htm>> [22 December 2000].

U.S. Department of the Army. Supporting Army Force Projection. Field Manual 63-4 (Final Draft). Washington DC: Posted 16 January 2001.

U.S. Joint Chiefs of Staff. Doctrine for Logistics Support of Joint Operations. Joint Pub 4-0. Washington, DC: 6 April 2000.

_____. Joint Task Force Planning. Joint Pub 5-00.2. Washington, DC: 6 April 2000.

_____. Joint Vision 2020. Washington, DC: June 2000.

_____. Joint Warfare of the Armed Forces of the United States. Joint Pub 1. Washington, DC: 10 January 1995.

U.S. Pacific Command. Deployable Joint Task Force Augmentation Cell Standard Operating Procedures. Memorandum. <<http://164.213.23.19/j3%2Dr/j38/djtfac.htm>> [22 December 2000].

_____. Organization and Administration of USCINCPAC Deployable Joint Task Force Augmentation Cell (DJTFAC). USCINCPAC Instruction 3020.11B. Camp H.M. Smith, HI: 10 September 1997.

_____. USCINCPAC/J4 Supplemental Instructions: Logistics and Engineering. J4 Supplement to USCINCPACINST 3020.11B. Camp H.M. Smith, HI: 4 November 1996.

Yakeley, Jay B. III. and Harold E. Bullock. "Training the Pacific Warriors." Joint Force Quarterly (Summer 1996): 16-21.